Causal Analysis

Module V

Instructor's Guide

Length of Session: 1 to 1.5 hours

Intended Audience: Regional center staff and vendored service providers

Class Size: Limited only by room capacity

Training Materials: Handout: Preventative Action Checklist

Power Point presentation (or transparencies): *Causal Analysis*

LCD projector or Overhead projector

Flipchart and markers (as desired)

Methods: Lecture; instructor guided discussion; interactive

Course Outline

I. Welcome and Introductions

II. Analysis of Contributing Causes

III. Development of Preventative Action

IV. Summary and Closing

Causal Analysis

Module V

Learning Objectives

At the conclusion of this module, participants will:

1. Understand the definition of causal analysis.
2. Understand how incident reporting influences causal analysis and the development of preventative action plans.
3. Complete a sample causal analysis of an incident.
4. Integrate information from the causal analysis into preventative action strategies.
5. Develop effective follow-up plans.

Causal Analysis

Script for Instructor	*Suggestions for Instructor*
Slide 1: **Causal Analysis** The purpose of this training is to learn a new way to determine what preventative actions should be taken after an incident occurs. Causal analysis has become common practice in industries that address major disasters, such as aerospace, nuclear power, and transportation. Causal analysis has been applied to the discovery of why certain catastrophes occurred. These include airplane crashes, nuclear power plant leaks, unplanned power outages, train derailments, and the like. Root Cause Analysis is a standardized way to review and analyze a situation to determine **WHY** an incident occurred. Causal analysis is determining the most **basic** cause or causes of an incident. During this session, we will review causal analysis and apply this method to the development of effective preventative action plans.	*Start the Power Point Presentation (or overhead transparencies and projector). Have the "Causal Analysis" title page running as you open the presentation.* *If participants have not received training in incident reporting, spend a few minutes on the importance of providing thorough and accurate information in reporting the incident.*

Script for Instructor	*Suggestions for Instructor*
Slide 2: **Causal Analysis** We know from our work in services for people with developmental disabilities that rarely, if ever, does any one thing cause an incident to occur. Generally, incidents occur because of a combination of different factors. It is this unique combination of factors that results in an accident, illness, or injury. Think about causal analysis as "peeling an onion" to reveal all contributing causes to an incident. In order to develop appropriate preventative action that will lessen the likelihood of the incident recurring, contributing causes need to be examined. Let's talk about a situation that may appear to be straight forward, but very well could be caused by many different things. This example involves Mary, a woman in her late 60's who fell when she got out of bed this morning. What are some possible causes for Mary's fall?	*In this example, you want to make the point that most incidents have more than one cause, and that at times, those causes are inter-related.* *List on a flip chart all the possible causes volunteered by participants. These may include: Mary was dizzy when she stood up due to blood pressure problems, Mary has an ear infection that affected her balance, Mary's roommate had spilled something on the floor, the overnight staff moved Mary's shoes and she tripped, etc.*

Script for Instructor	***Suggestions for Instructor***
Slide 3: **Purposes of Causal Analysis** The difference between causal analysis and special incident reporting is that, in causal analysis, we want to learn more about an incident than just the facts that surround it. We want to do more than simply *report* an incident. In causal analysis, our goal is to *learn* from the incident. We want to learn why the incident occurred and then ***minimize the possibility of it happening again***. Are any of you aware of an incident that, within a short time, **re**occurred with the person or happened to another person in a similar situation? Causal analysis is a way to be proactive when an incident occurs. When we are reactive, we simply *react* to what has happened: We report the incident to the appropriate people and complete the necessary paper work. When we are proactive, we still report and document, but we also learn from what has occurred. With a proactive approach, we consider how the same incident could happen to this person ***again*** or how the same situation may negatively affect other people.	*List these examples on a flip chart you can refer to during later discussions of preventative action.* *Examples may include falls in the same location of the day program, choking on food that was not prepared according to texture modification requirements, being injured repeatedly by a house mate who has assaultive behavior, etc.*

Script for Instructor	*Suggestions for Instructor*
Slide 4: **Traditional or Cause Analysis** Another way to understand causal analysis is to look at a traditional approach to an incident compared to a causal analysis approach. Typically in the traditional approach, we want to know what happened, who caused it, and what will happen to them. With the causal approach, we may still address those things, but we don't stop there. We ask ***"Why"*** the incident happened, what contributed to the incident happening, and how could it have been prevented. Remember: most incidents do not have only one cause. Usually several things, all working together, contribute to an incident. The traditional approach is concerned with individual blame. The causal approach, on the other hand, is more concerned with problems in the *system*, such as: ▪ Poorly designed policies ▪ Procedures not carried out ▪ Supplies not available ▪ Lack of training or supervision	

Script for Instructor	*Suggestions for Instructor*
Slide 4 (continued) The causal approach admits that sometimes people are put into situations where mistakes are likely to be made. Changing the person will not prevent recurrence without changing the situation or the factors that contributed to a human error occurring in the first place.	
***Slide 5:* A 12 Step Process** This slide outlines causal analysis as a 12-step process. ▪ For Steps 1-3, you need to get the appropriate people together, review the facts, and determine the primary or most obvious cause. The appropriate people would be those who have first hand knowledge of the incident, or who know the consumer well. ▪ Steps 4-6 involve brainstorming possible causes, remembering that with brainstorming, no idea is wrong or too far-fetched. This will lead to identifying barriers and common factors that contributed to the incident. ▪ Steps 7-12 are then used to complete the analysis. Questions regarding all common factors need to be asked and answered. To do this, you will have to ask **WHY** over and over again. Don't settle for a single answer until "the onion is completely peeled" and you have arrived at the most basic, or root cause, of the incident.	*This slide will remain displayed during the review of the process and the application of the example with Maria and Sue that follows.*

Script for Instructor	***Suggestions for Instructor***
Slide 5 (continued) After the causal analysis is complete, preventative actions can be developed, leadership support can be obtained, and the plan can be implemented, and then monitored for effectiveness. Let's apply these steps to a situation involving a consumer named Maria and a staff member named Sue. One evening while Sue was helping Maria take a bath, Sue left the bathroom briefly to get a towel. When she returned, Maria was lying on the floor bleeding from a large cut on her head.	*Lead the group, step by step with questions regarding the scenario of Maria being injured.* *When the primary cause is mentioned, (e.g., Maria was left unsupervised in the bathroom), ask "WHY?" to encourage participants to go deeper into the situation. For example: Maria was unsupervised because Sue did not get the towel first.* ***WHY?*** *Because Sue was distracted and did not prepare completely.* ***WHY?*** *Because there was another emergency going on at the same time.* ***WHY?*** *Because Sue was going to help Maria bathe while another staff person was on break.* ***WHY?*** *Continue until the most basic cause can be determined along with various contributing factors.*

Slide 6: **Possible Common Factors** These **Common** elements are factors that *typically* contribute to special incidents. To complete a causal analysis and determine the contributing factors, each of these should be considered. ▪ **Staff:** *Available staff, tenure, training, competency level, and experience.* ▪ **Consumer:** *Medical status, functional ability, cognitive level, behavior, physical ability, needs, and preferences.* ▪ **Communication:** *Communication systems between consumer, family, providers, staff, shifts, supervisors, disciplines, information, and availability.* ▪ **Equipment**: *Needed, available, working, and in need of adaptation.* ▪ **Policies:** *Policies in place, known, followed, and effective.* ▪ **Environment:** *Life Safety Code violations, cold/hot, noise level, distractions, light/dark, modified, and distractions.* ▪ **Leadership:** *Supervision, training, oversight, and organizational support for a culture that focuses on health and safety.*	*Following the review of this slide, it will be important for participants to practice reviewing an incident to arrive at causal factors.* *A way to do this is to have them review an incident, either individually or in groups. The above incident on Maria can be used, as well as an incident volunteered by one of the participants.* *One way to structure this activity is to have each of the factors listed on a sheet of paper and have the participants list what about that factor "caused" or contributed to this event.* *It is important to point out that discussing common factors may result in the participants realizing that they do not have all the facts and that they have to go back to fact finding.*

Slide 7: **Advantages of Cause Analysis** Causal analysis provides a standard way to review incidents. It is cost effective as it uses information that is already available and helps eliminate difficult or costly reactions to incidents that may not effectively minimize the possibility of the incident recurring. Learning from the incident through causal analysis is a way to prevent partial or incomplete solutions. Now that we have determined the cause(s) of the incident, we can begin to decide what an appropriate follow-up plan would be.	
Slide 8: **Preventative Action** Preventative action is the ability of the system to ensure appropriate actions are taken following an incident. Effective preventative action plans apply corrective actions to the areas of concern found in the causal analysis. Preventative action plans should be developed with a specific goal in mind: what is the intended outcome or result of this preventative action and how will it prevent recurrence? Effective preventative action plans identify responsible parties, timelines, and methods for measuring results. Just as completing a causal analysis takes more than one person, development of preventative actions will take more than one person.	

Slide 8 (continued) All relevant people, including the provider and service coordinator, should collaboratively develop action plans. All parties share responsibility for implementation and oversight so that preventative actions minimize the likelihood of recurrence.	
Slide 9: **Preventative Action Checklist** When developing preventative action plans, there are several things you should ask. The Preventative Action checklist will give you guidance on this task. This checklist is intended to be something you can use for almost every incident; therefore, everything on it will not apply in every situation. A few fundamental questions, however, apply. ▪ Does the action to be taken address the cause of the incident? ▪ Is the action to be taken within the control of the responsible person? ▪ Are the necessary resources available? ▪ If the preventative action is effectively implemented, can it minimize recurrence of the incident?	*Distribute the Preventative Action Checklist. Give participants a few minutes to review it and ask questions on individual steps. Have participants apply the checklist to a recent incident with which they are familiar. You may also use this opportunity to note any special requirements of this regional center regarding preventative action planning.*

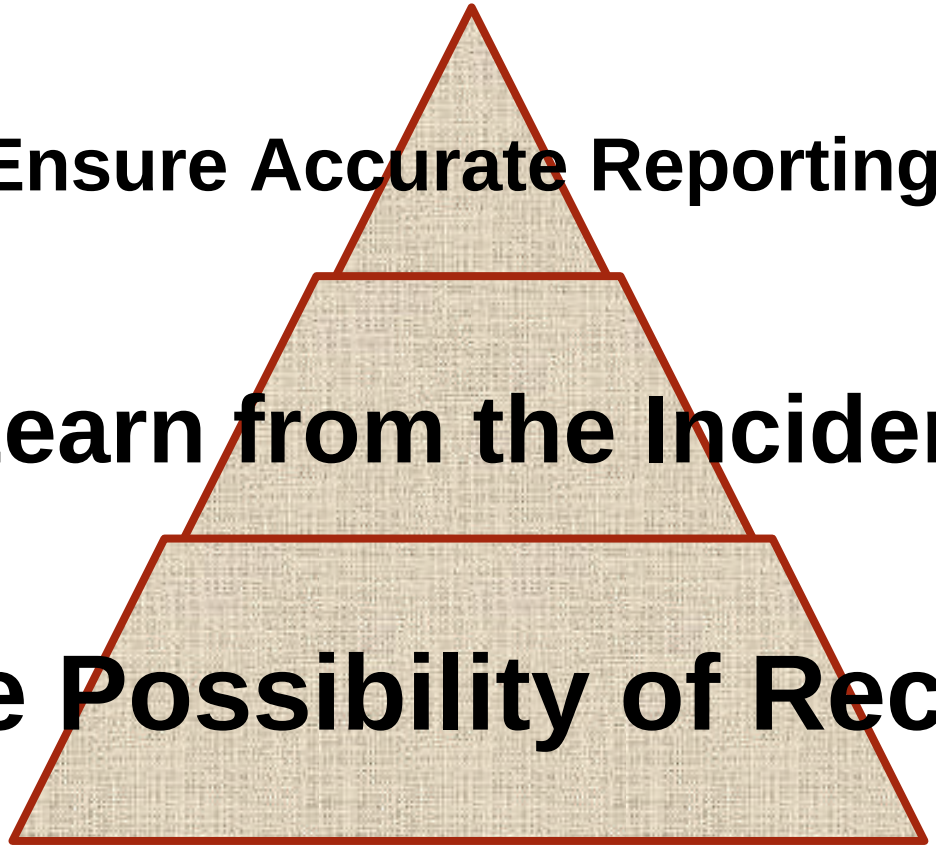
Slide 10: **Causal Analysis** Causal analysis is an integral part of the risk management process. It provides direction to planning for preventative actions and focuses on the outcomes that will reduce the likelihood of incidents reoccurring.	

Causal Analysis

Causal Analysis

The most basic reason(s) for an undesirable condition or problem

Purposes of Cause Analysis



Traditional or Cause Analysis

Traditional Approach

- What happened?
- Who was responsible?
- What are we going to do to them?

Cause Analysis

- WHY did it happen?
- What factors contributed?
- Were barriers present?
- How could it have been prevented?

A 12 Step Process

1) Involve appropriate people
2) Review facts
3) Determine primary cause
4) Brainstorm potential contributing factors
5) Identify barriers
6) Check common factors
7) Complete analysis
8) Ask WHY questions
9) Determine contributing causes
10) Develop preventative action
11) Obtain leadership support
12) Monitor results

Possible Common Factors

- Staff
- Consumers
- Communication Systems
- Equipment
- Policies
- Environment
- Leadership

Advantages of Cause Analysis

- Standardized process
- More complete analysis
- Increased likelihood of improvement oriented conclusions
- Greater buy-in from participants

Preventative Action

- Identifies situations where corrective actions are needed
- Ensures appropriate actions are taken
- Provides method to evaluate effectiveness

Preventative Action Checklist

- Does the action address the cause of the incident?
- Is the action within the control of the responsible person?
- Are needed resources available?
- If the preventative action is implemented, could it prevent the incident from happening again?

Causal Analysis

- **Contributes to the Risk Management Process**
- **Gives direction to preventative action**
- **Focuses on outcomes**

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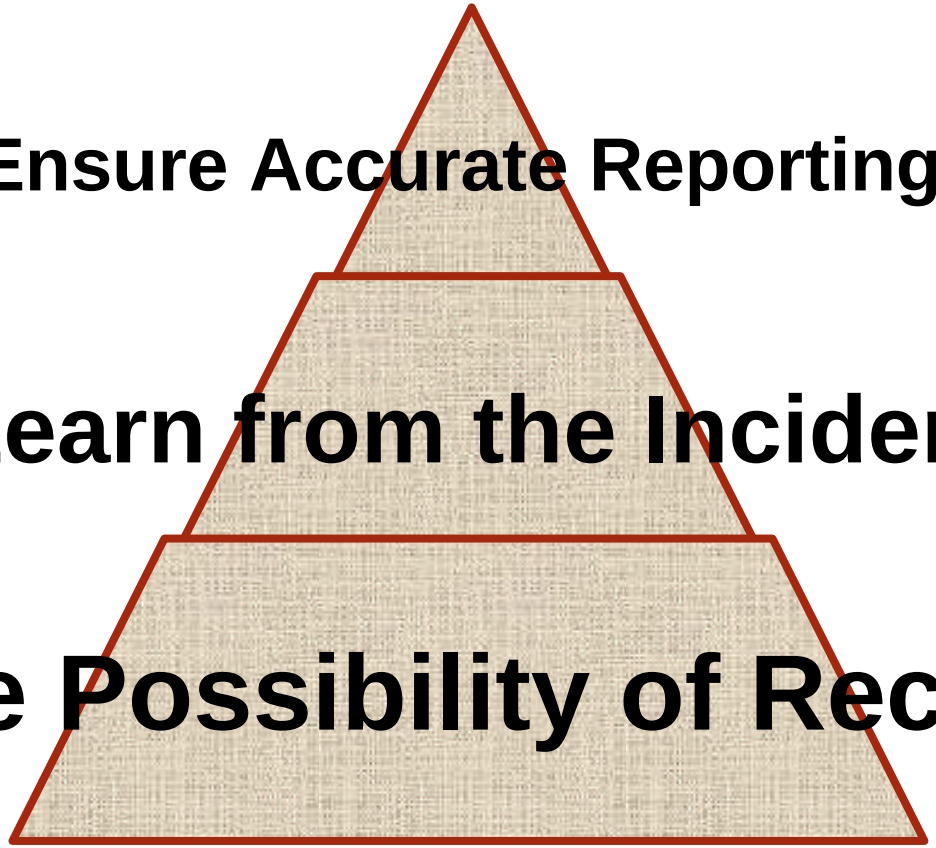

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Preventative Action Checklist

The following steps will assist you to develop preventative actions in response to a report of a special incident. The steps on the left are intended to guide you through the process. The strategies on the right are suggested guidelines for completing each step. Not all steps will apply to every situation. Strategies should be coded as follows:

Y = Yes **N** = No **NA** = Not Applicable

Steps	Strategies
Does the action address the cause of the incident?	___ Have all "who", "what", "when", and "where" questions been answered? ___ Does the incident description adequately depict what happened? ___ Could the incident occur again? ___ Is more than one explanation possible for what happened?
Have prior data and documentation been analyzed to determine any possible contributing factors?	___ Has there been a record review? ___ Have there been documented skills deterioration, sleep disturbances, changes in eating habits, or changes in medication? ___ Have there been changes in events, stressors, and/or noise levels? ___ Has the person been a victim of abuse or neglect? ___ Can you identify any related patterns (employees, place, times of day, setting conditions, other consumers, etc.)? ___ Have environmental issues been identified and corrected?
Does the preventative action plan include specific actions?	___ Is it measurable? ___ Are timelines for preventative action included? ___ Does the preventative action plan include the responsible person(s) and actions needed to be taken?
Are the preventative actions doable?	___ Are noted actions within the control of the service coordinator, regional center, and/or provider? ___ Are necessary resources available? ___ Does the responsible person have the authority to implement prescribed actions?
Can it be monitored?	___ Is there a clear and objective system in place to monitor the implementation and effectiveness of the preventative action plan?
If the preventative actions are implemented, can they prevent the incident recurring?	___ Have past preventative actions been effective in reducing risk? ___ Have all elements of previous preventative action plans been implemented?
If the incident was linked to a medical issue, is medical or clinical assessment or follow-up needed?	___ Was it completed? ___ Was it documented?
If the incident involves a behavioral issue, does the person(s) involved have a behavior plan?	___ If no, is one needed? ___ If yes, has it been reviewed to determine its continued effectiveness? ___ Was it implemented effectively?
If the incident involved an environmental factor, was it rectified?	___ Was the action implemented and documented?
If the incident was linked to a programmatic issue, has the person responsible for the training program been notified and involved?	___ Has the program been reviewed and revised as necessary? ___ Are any revisions documented?